REMARKS

Claims 1-28 are pending in this application. Applicants respectfully request that the Examiner reconsider the rejection of claims 1-28 in light of the arguments presented below and as discussed during a phone conversation on May 30, 2006.

Rejections under 35 U.S.C. § 102

Applicants respectfully request reconsideration of the rejection of claims 1-12, and 24-26 under 35 U.S.C. § 102 as being anticipated by U.S. Patent Application No. 6,757,429 to Hu. ("Hu") in light of the arguments presented below.

The Examiner asserts that Hu discloses all of the features of independent claim 1. Claim 1, includes the feature of receiving video display data into a resizer, the video display data having a color format associated with a first sub-sampling scheme; adjusting a size associated with the video display data through the resizer; and compressing the size adjusted video display data through a second sub-sampling scheme, among other features. These features are not taught or disclosed by Hu. Hu discloses a method for compressing digital images and storing the compressed data in multiple subsampling quality scales so that higher quality scales only include incremental data to the data in adjacent lower quality scales (see abstract). Each representation at a higher quality scale is represented in terms of a differential at an adjacent lower quality scale (see column 2 lines 56-58). Hu transforms the original representation into a lowest quality scale plus the differential images (see column 2, lines 62-64).

Claim 1, as amended, receives the data into a resizer, adjusts the size of the data and then further compresses the size-adjusted data. Applicants respectfully assert that Hu does not teach or disclose these features. Nowhere does Hu disclose receiving the data into a resizer to adjust the size associated with the video display data and then compressing the size adjusted video. Hu bases everything off of the original image to define the various scales. In addition, Hu explicitly states that the subsampling quality scale cannot be smaller than the original image scale (see column 9, lines 25-26). Accordingly, Applicants respectfully request that the Examiner point out how Hu adjusts the size of the data through a resizer and then compresses the size adjusted data, as Hu only applies to image data that has been

upscaled to define the differentials, i.e., is restricted to functioning in one direction (see Figures 1 and 2, and column 11, lines 7-15). Furthermore, the Examiner has not pointed out where Hu discloses a resizer which crops and scales the data as claimed and as further defined on page 9 of the current application. The Applicants respectfully disagree with the Examiner's assertion that the scaling algorithms disclose a resizer that crops and scales the data. The scaling algorithm of Hu prevents the number of pixels from changing as the subsampling occurs (see column 8, line 26). Keeping the number of pixels constant is different functionally from a resizer, which is not concerned with keeping the number of pixels constant. Furthermore, the present invention resizes the image data and then subsamples, whereas Hu requires that the scaling algorithm is applied after subsampling.

Claim 3 specifies converting the compressed data to a different color format and then storing the data in that format. The Examiner asserts that changing the subsampling scheme discloses the different color formats. In the Office Action, the Examiner uses the different subsampling schemes to anticipate the compression from a first to a second subsampling scheme within the same color format. Here, the Examiner asserts that the subsampling scheme is used to convert to different color formats. The Examiner cannot use the subsampling scheme to disclose both features, as this is inconsistent. Hu requires that subsampling schemes be within the same color format and nowhere discloses converting between color formats. Applicants respectfully request that the Examiner further define how the subsampling scheme discloses both compression and converting between color formats, i.e., RGB to YUV, etc. Claims 2, and 4-8 depend from claim 1 and are not anticipated by Hu for at least the above stated reasons.

Claim 9, as amended, includes the features of program instructions for receiving video display data having a color format associated with a first sub-sampling scheme into a resizer, the first sub-sampling scheme being a 4:2:2 compression scheme; program instructions for adjusting a size associated with the video display data through the resizer; and program instructions for compressing the size adjusted video display data through a second sub-sampling scheme. For at least the reasons stated above, claim 9 is not anticipated by Hu. In addition, claim 11 is not anticipated by Hu for at least the reasons mentioned above with regard to

claim 3. Claims 10 and 12 depend from claim 9 and are not anticipated by Hu for at least the above stated reasons.

Claim 24 includes the features of circuitry for adjusting a display size of the previously compressed digital video data prior to further compression; and circuitry for sub-sampling the size adjusted previously compressed digital video data for compression according to a YUV type standard. As mentioned above, Hu does not disclose adjusting a display size of previously compressed data. Hu stores differential data for each higher quality level and is restricted to proceeding in an upscaling manner as the scale size cannot be less than the original image. As specified in claim 24, the display size is adjusted for previously compressed digital data, i.e., the compressed data (original data) is further downscaled. Claims 25-26 depend from claim 24 and are not anticipated for at least the above stated reasons.

Rejections under 35 U.S.C. § 103

Claim 28 was rejected as being unpatentable over Hu. Claim 28 depends from claim 24 and is allowable for at least the above stated reasons.

Claims 13-17, 19, 21, and 27 were rejected under 35 U.S.C. § 103 as being unpatentable over Hu in view of US Patent No. 6,297,801 to Jiang (Jiang). Claim 13 includes the feature of a conversion module configured to compress the size adjusted digital video data defined through the YUV color format from the resizer. With regards to claims 3 and 11, the Examiner asserted that Hu discloses converting the compressed data to different color formats. Now with regard to claim 13, the Examiner is acknowledging that Hu does not teach converting the compressed data between color formats. Applicants find these positions in contradiction with each other and respectfully request that the Examiner clarify this contradiction. The Applicants further disagree with the Examiners characterization that Hu teaches a resizer block configured to receive digital video data defined through a YUV color format, the resizer block capable of scaling and cropping the digital video data to define size adjusted digital video data; and a conversion module configured to compress the size adjusted digital video data defined through the YUV color format from the resizer. Nowhere does Hu disclose a resizer block that scales and crops image data to define size adjusted image data. What the Examiner is referring to as a resizer block is simply an algorithm to

reduce the number of pixels to keep the overall size consistent between subsampling formats (see column 8, lines 26-32).

The Applicants further request that the Examiner explain where Hu discloses the feature of a color space conversion block that is further configured to independently apply a scale factor and an offset factor prior to applying a transform matrix to the compressed digital video data as specified in claim 17. With regard to claim 13, the Examiner states that Hu does not teach a color space conversion block, but when examining claim 17, which depends from claim 13, the Examiner asserts Hu teaches a color space conversion block that performs as specified in claim 17. Applicants respectfully request that the Examiner explain how Hu fails to teach a color space conversion block in claim 13 but does teach a color space conversion block that includes a scale factor and an offset factor prior to applying a transform matrix to compressed data in claim 17. Hu never mentions a scale factor, an offset factor or a transform matrix. If the Examiner maintains that rejection, the Applicants respectfully request that the Examiner point out where each of these features are disclosed within Hu or any cited reference. Claims 14-16 depend from claim 13 and are patentable over the combination of Hu and Jiang for at least the above stated reasons.

Claims 19 includes the color space conversion block and claim 21 includes the scale factor, the offset factor and the matrix discussed above with regard to claims 13 and 17, respectively. Thus, for at least the above stated reasons, claims 19 and 21 are patentable over the combination of Hu and Jiang.

Claims 27 depends from claim 24 and is patentable for at least the reasons stated above with regard to claim 24.

Claims 20 and 22-23 were rejected under 35 U.S.C. § 103 as being unpatentable over Hu in view of US Patent Publication No. 2002/0057265 to Tamura (Tamura). Claims 20 and 22-23 depend from claim 19 and are allowable for at least the above stated reasons as Tamura fails to cure the deficiencies of Hu.

Claim 18 was rejected as being unpatentable over Hu in view of US Patent Publication 2004/0202365 to Spaulding. The Examiner refers to scale factors mentioned in Spaulding while ignoring the fact that claim 18 refers to offset factors. Applicants respectfully request that the Examiner explain how the scale

factors in <u>Spaulding</u> have anything to do with the offset factors of claim 18. In addition, the Examiner asserts that the scale factors are applied prior to application of a transform matrix. <u>Spaulding</u> does not refer to the application of any transform matrix and the Applicants respectfully request that the Examiner provide the basis for asserting that <u>Spaulding</u> discloses this feature.

In view of the foregoing, Applicant respectfully submits that all of the pending claims are in condition for allowance. A notice of allowance is respectfully requested. In the event a telephone conversation would expedite the prosecution of this application, the Examiner may reach Applicant's representative, Michael Gencarella (Reg. No. 44,703) at (408) 749-6900, ext. 6921.

Respectfully submitted,

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